

WHAT IS CLAIMED IS

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1. An image reading apparatus comprising:
a reading part reading original;
a time measuring part being able to measure
different times selectively; and

10 a defining part determining separation of
sheets of the original read by said reading part,
wherein said time measuring part selects a
time to be measured according to a predetermined
condition, and said defining part determines the
15 separation of sheets of the original when the selected
time has elapsed without an operation concerning a
reading operation being re-started after the reading
operation of said reading part is once stopped.

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2. The image reading apparatus as claimed in
claim 1, wherein said predetermined condition comprises
25 a condition of using the apparatus.

3. The image reading apparatus as claimed in claim 2, wherein said condition of using the apparatus comprises a function of the apparatus which is executed by reading the original.

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4. The image reading apparatus as claimed in
10 claim 3, wherein said function of the apparatus is at least one of a facsimile transmission function, a photocopying function and a scanning function.

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5. The image reading apparatus as claimed in claim 2, wherein said condition of using the apparatus is either one of a case where an automatic original
20 feeding function is used and a case where the automatic original feeding function is not used and a user manually feeds the original.

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6. The image reading apparatus as claimed in
claim 5, wherein the time measured by the time measuring
part is set short in the case where the automatic
original feeding function is used but long in the case
5 where a user manually feeds the original.

10 7. The image reading apparatus as claimed in
claim 5, wherein, when operation of changing from a
condition in which the automatic original feeding
function is used to a condition in which the original is
fed manually is detected during the measurement of the
15 time of the case of using the automatic original feeding
function by said time measuring part, said defining part
determines that the measurement has finished even during
the measurement of said time, and that the separation of
sheets of the original occurs.

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8. The image reading apparatus as claimed in
25 claim 5, wherein, when an operation of again manually

feeding the original is detected during measurement of the time of the case of manually feeding the original by said time measuring part, said time measuring part restarts the measurement of said time.

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9. The image reading apparatus as claimed in
10 1, wherein measurement of the time by said time
measuring part is stopped by a predetermined operation.

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10. The image reading apparatus as claimed in
claim 1, further comprising a registering part for
previously registering, for the original to be read, as
a plurality of documents,

20 wherein image data read by said reading part
from the original is treated as respective ones of the
plurality of documents registered by said registering
part.

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11. The image reading apparatus as claimed in
claim 10, wherein said registering part is used for
registering document information for each of the
plurality of documents, and adds the document
5 information to the image data for each document.

10 12. The image reading apparatus as claimed in
claim 11, wherein the document information comprises at
least one of a reading condition, user information and
storage information.

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13. The image reading apparatus as claimed in
claim 10, further comprising a display part displaying
20 the contents registered by said registering part during
the reading operation by said reading part.

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14. The image reading apparatus as claimed in
claim 10, further comprising:

a display part displaying the contents
registered by said registering part after the reading
5 operation by said reading part; and

a confirming/editing part for
confirming/editing the registered contents viewing them
displayed by said displaying part.

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15. The image reading apparatus as claimed in
claim 1, treating one or a plurality of sheets of
15 original as one document, comprising:

a display part displaying contents comprising
separation of sheets of the original determined by said
time measuring part and defining part, as temporary
registered contents; and

20 a confirming/editing part for
confirming/editing the temporary registered contents
viewing them displayed by said displaying part.

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16. The image reading apparatus as claimed in
claim 15, wherein said confirming/editing part is used
for registering document information for each document
of the plurality of document, and adding the document
5 information to the image data for each document.

10 17. The image reading apparatus as claimed in
claim 16, wherein the document information comprises at
least one of a reading condition, user information and
storage information.

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18. An image reading apparatus treating one
or a plurality of sheets of original as one document,
20 comprising:

a display part displaying contents comprising
separation of documents determined by a predetermined
method, as temporary registered contents; and

25 a confirming/editing part for
confirming/editing the temporary registered contents

viewing them displayed by said displaying part.

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19. The image reading apparatus as claimed in
claim 18, wherein said confirming/editing part is used
for registering document information for each document
of the plurality of document, and adding the document
10 information to the image data for each document.

15 20. The image reading apparatus as claimed in
claim 19, wherein the document information comprises at
least one of a reading condition, user information and
storage information.

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21. An image reading apparatus treating one
or a plurality of sheets of original as one document,
25 comprising:

a registering part for previously registering, for original to be read, as a plurality of documents; and

5 a reading part reading the original, wherein image data obtained by said reading part is treated for each document of the plurality of documents registered by said registering part.

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22. The image reading apparatus as claimed in claim 21, wherein said registering part registers document information for each document of the plurality 15 of documents, and adds the document information to the image data for each document.

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23. The image reading apparatus as claimed in claim 22, wherein the document information comprises at least one of a reading condition, user information and storage information.

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24. The image reading apparatus as claimed in
claim 21, further comprising a display part displaying
the contents registered by said registering part during
the reading operation by said reading part.

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25. The image reading apparatus as claimed in
10 claim 21, further comprising:

a display part displaying contents registered
by said registering part after the reading operation by
said reading part; and

15 a confirming/editing part for
confirming/editing the registered contents viewing them
displayed by said displaying part.

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26. An image reading apparatus treating one
or a plurality of sheets of original as one document,
comprising:

25 a reading part reading the original,
a registering part for registering, for image

data obtained from original by said reading part, as a plurality of documents; and

wherein the image data obtained by said reading part is treated for each document of the 5 plurality of documents registered by said registering part.

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27. The image reading apparatus as claimed in claim 26, wherein said registering part registers document information for each document of the plurality of documents, and adds the document information to the 15 image data for each document.

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28. The image reading apparatus as claimed in claim 27, wherein the document information comprises at least one of a reading condition, user information and storage information.

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29. An image processing system comprising:
the image reading apparatus as claimed in
claim 1; and

a storage device storing therein image data
5 for which separation of sheets of original is already
determined obtained by said image reading apparatus, as
particular documents obtained from the separation of
sheets of the original.

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30. An image processing system comprising:
the image reading apparatus as claimed in
15 claim 10; and

a storage device storing therein image data
for which separation of sheets of original is already
determined obtained by said image reading apparatus, as
particular documents obtained from the separation of
20 sheets of the original.

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31. An image processing system comprising:

the image reading apparatus as claimed in
claim 15; and

15 a storage device storing therein image data
for which separation of sheets of original is already
determined obtained by said image reading apparatus, as
particular documents obtained from the separation of
sheets of the original.

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32. An image processing system comprising:
the image reading apparatus as claimed in
claim 18; and

15 a storage device storing therein image data
for which separation of sheets of original is already
determined obtained by said image reading apparatus, as
particular documents obtained from the separation of
sheets of the original.

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25 33. An image processing system comprising:
the image reading apparatus as claimed in

claim 21; and

a storage device storing therein image data for which separation of sheets of original is already determined obtained by said image reading apparatus, as 5 particular documents obtained from the separation of sheets of the original.

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34. An image processing system comprising:
the image reading apparatus as claimed in
claim 26; and

a storage device storing therein image data 15 for which separation of sheets of original is already determined obtained by said image reading apparatus, as particular documents obtained from the separation of sheets of the original.

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35. The image processing system as claimed in
claim 29, further comprising a communication part
25 transmitting the image data for which separation of

sheets of original is already determined obtained by said image reading apparatus, as particular documents obtained from the separation of sheets of the original, to said storage device.

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36. The image processing system as claimed in
10 claim 30, further comprising a communication part
transmitting the image data for which separation of
sheets of original is already determined obtained by
said image reading apparatus, as particular documents
obtained from the separation of sheets of the original,
15 to said storage device.

20 37. The image processing system as claimed in
claim 31, further comprising a communication part
transmitting the image data for which separation of
sheets of original is already determined obtained by
said image reading apparatus, as particular documents
25 obtained from the separation of sheets of the original,

to said storage device.

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38. The image processing system as claimed in
claim 32, further comprising a communication part
transmitting the image data for which separation of
sheets of original is already determined obtained by
10 said image reading apparatus, as particular documents
obtained from the separation of sheets of the original,
to said storage device.

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39. The image processing system as claimed in
claim 33, further comprising a communication part
transmitting the image data for which separation of
20 sheets of original is already determined obtained by
said image reading apparatus, as particular documents
obtained from the separation of sheets of the original,
to said storage device.

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40. The image processing system as claimed in
claim 34, further comprising a communication part
transmitting the image data for which separation of
sheets of original is already determined obtained by
5 said image reading apparatus, as particular documents
obtained from the separation of sheets of the original,
to said storage device.

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41. The image processing system as claimed in
claim 35, wherein said communication part comprises a
network.

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42. The image processing system as claimed in
20 claim 36, wherein said communication part comprises a
network.

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43. The image processing system as claimed in
claim 37, wherein said communication part comprises a
network.

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44. The image processing system as claimed in
claim 38, wherein said communication part comprises a
10 network.

15 45. The image processing system as claimed in
claim 39, wherein said communication part comprises a
network.

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46. The image processing system as claimed in
claim 40, wherein said communication part comprises a
network.

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47. The image processing system as claimed in
claim 35, wherein said communication part comprises a
facsimile transmission system.

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48. The image processing system as claimed in
claim 36, wherein said communication part comprises a
10 facsimile transmission system.

15 49. The image processing system as claimed in
claim 37, wherein said communication part comprises a
facsimile transmission system.

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50. The image processing system as claimed in
claim 38, wherein said communication part comprises a
facsimile transmission system.

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51. The image processing system as claimed in claim 39, wherein said communication part comprises a facsimile transmission system.

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52. The image processing system as claimed in claim 40, wherein said communication part comprises a 10 facsimile transmission system.

15 53. An image reading method comprising the steps of:

a) reading original;
b) measuring different times selectively; and
c) determining separation of sheets of the
20 original read by said step a),

wherein said step b) selects a time to be measured according to a predetermined condition, and said step c) determines the separation of sheets of the original when the selected time has elapsed without an 25 operation concerning a reading operation being restarted

after the reading operation of said step a) is once stopped.

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54. The image reading method as claimed in claim 53, wherein said predetermined condition comprises a condition of using an apparatus to be used.

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55. The image reading method as claimed in claim 54, wherein said condition of using the apparatus comprises a function of the apparatus which is executed by reading the original.

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56. The image reading method as claimed in claim 55, wherein said function of the apparatus is at least one of a facsimile transmission function, a photocopying function and a scanning function.

57. The image reading method as claimed in
claim 54, wherein said condition of using the apparatus
is either one of a case where an automatic original
feeding function is used and a case where the automatic
5 original feeding function is not used and a user
manually feeds the original.

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58. The image reading method as claimed in
claim 57, wherein the time measured by said step b) is
set short in the case where the automatic original
feeding function is used but long in the case where a
15 user manually feeds the original.

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59. The image reading method as claimed in
claim 57, wherein, when operation of changing from a
condition in which the automatic original feeding
function is used to a condition in which the original is
fed manually is detected during the measurement of the
25 time of the case of using the automatic original feeding

function by said b), said step c) determines that the measurement has finished even during the measurement of said time, and that the separation of sheets of the original occurs.

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60. The image reading method as claimed in
10 claim 57, wherein, when an operation of again manually
feeding the original is detected during measurement of
the time of the case of manually feeding the original by
said step b), said step b) re-starts the measurement of
said time.

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61. The image reading method as claimed in 53,
20 wherein measurement of the time by said step b) is
stopped by a predetermined operation.

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62. The image reading method as claimed in
claim 53, further comprising the step d) previously
registering, for the original to be read, as a plurality
of documents,

5 wherein image data read by said step a) from
the original is treated as respective ones of the
plurality of documents registered by said step d).

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63. The image reading method as claimed in
claim 62, wherein said step d) registers document
information for each of the plurality of documents, and
15 adds the document information to the image data for each
document.

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64. The image reading method as claimed in
claim 63, wherein the document information comprises at
least one of a reading condition, user information and
storage information.

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65. The image reading method as claimed in
claim 62, further comprising the step e) displaying the
contents registered by said step d) during the reading
operation by said step a).

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66. The image reading method as claimed in
10 claim 62, further comprising the steps of:

e) displaying the contents registered by said
step d) after the reading operation by step a); and
f) confirming/editing the registered contents
viewing them displayed by said step e).

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67. The image reading method as claimed in
20 claim 53, treating one or a plurality of sheets of
original as one document, comprising the steps of:

d) displaying contents comprising separation
of sheets of the original determined by said steps b)
and c), as temporary registered contents; and
25 e) confirming/editing the temporary registered

contents viewing them displayed by said step d).

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68. The image reading method as claimed in
claim 67, wherein said step e) registers document
information for each document of the plurality of
document, and adds the document information to the image
10 data for each document.

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69. The image reading method as claimed in
claim 68, wherein the document information comprises at
least one of a reading condition, user information and
storage information.

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70. An image reading method treating one or a
plurality of sheets of original as one document,
25 comprising the steps of:

- a) displaying contents comprising separation of sheets of original determined by a predetermined method, as temporary registered contents; and
- b) confirming/editing the temporary registered contents viewing them displayed by said step a).

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10 71. The image reading method as claimed in claim 70, wherein said step b) registers document information for each document of the plurality of document, and adds the document information to the image data for each document.

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72. The image reading method as claimed in
20 claim 71, wherein the document information comprises at least one of a reading condition, user information and storage information.

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73. An image reading method treating one or a plurality of sheets of original as one document, comprising the steps of:

- a) previously registering, for original to be read, as a plurality of documents; and
- b) reading the original,

wherein image data obtained by said step b) is treated for each document of the plurality of documents registered by said step a).

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74. The image reading method as claimed in claim 73, wherein said step a) registers document information for each document of the plurality of documents, and adds the document information to the image data for each document.

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75. The image reading method as claimed in claim 74, wherein the document information comprises at least one of a reading condition, user information and

storage information.

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76. The image reading method as claimed in
claim 73, further comprising the step c) displaying the
contents registered by said step a) during the reading
operation by said step b).

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77. The image reading method as claimed in
15 claim 73, further comprising:

c) displaying contents registered by said
registering part after the reading operation by said
step b); and

20 d) confirming/editing the temporary registered
contents viewing them displayed by said step c).

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78. An image reading method treating one or a

plurality of sheets of original as one document,
comprising the steps of:

- a) reading the original; and
- b) registering, for image data obtained from
5 original by said reading part, as a plurality of
documents,

wherein the image data obtained by said step
a) is treated for each document of the plurality of
documents registered by said step b).

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79. The image reading method as claimed in
15 claim 78, wherein said step b) registers document
information for each document of the plurality of
documents, and adds the document information to the
image data for each document.

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80. The image reading method as claimed in
claim 79, wherein the document information comprises at
25 least one of a reading condition, user information and

storage information.

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81. An image processing method comprising the step of storing image data for which separation of sheets of original is already determined obtained by the image reading method as claimed in claim 53, as 10 particular documents obtained from the separation of sheets of the original.

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82. An image processing method comprising the step of storing image data for which separation of sheets of original is already determined obtained by the image reading method as claimed in claim 62, as 20 particular documents obtained from the separation of sheets of the original.

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83. An image processing method comprising the
step of storing image data for which separation of
sheets of original is already determined obtained by the
image reading method as claimed in claim 67, as
5 particular documents obtained from the separation of
sheets of the original.

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84. An image processing method comprising the
step of storing image data for which separation of
sheets of original is already determined obtained by
said image reading method as claimed in claim 70, as
15 particular documents obtained from the separation of
sheets of the original.

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85. An image processing method comprising the
step of storing image data for which separation of
sheets of original is already determined obtained by the
image reading method as claimed in claim 73, as
25 particular documents obtained from the separation of

sheets of the original.

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86. An image processing method comprising the step of storing image data for which separation of sheets of original is already determined obtained by the image reading method as claimed in claim 78, as 10 particular documents obtained from the separation of sheets of the original.

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87. The image processing method as claimed in claim 81, further comprising the step of transmitting the image data for which separation of sheets of original is already determined obtained by said image 20 reading method, as particular documents obtained from the separation of sheets of the original, to be stored by said storing step.

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88. The image processing method as claimed in claim 82, further comprising the step of transmitting the image data for which separation of sheets of original is already determined obtained by said image 5 reading method, as particular documents obtained from the separation of sheets of the original, to be stored by said storing step.

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89. The image processing method as claimed in claim 83, further comprising the step of transmitting the image data for which separation of sheets of original is already determined obtained by said image 15 reading method, as particular documents obtained from the separation of sheets of the original, to be stored by said storing step.

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90. The image processing method as claimed in claim 84, further comprising the step of transmitting 25 the image data for which separation of sheets of

original is already determined obtained by said image reading method, as particular documents obtained from the separation of sheets of the original, to be stored by said storing step.

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91. The image processing method as claimed in
10 claim 85, further comprising the step of transmitting
the image data for which separation of sheets of
original is already determined obtained by said image
reading method, as particular documents obtained from
the separation of sheets of the original, to be stored
15 by said storing step.

92. The image processing method as claimed in
claim 86, further comprising the step of transmitting
20 the image data for which separation of sheets of
original is already determined obtained by said image
reading method, as particular documents obtained from
the separation of sheets of the original, to be stored
by said storing step.

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93. The image processing method as claimed in
claim 87, wherein said transmitting step uses a network.

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94. The image processing method as claimed in
claim 88, wherein said transmitting step uses a network.

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95. The image processing method as claimed in
claim 89, wherein said transmitting step uses a network.

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96. The image processing method as claimed in
20 claim 90, wherein said transmitting step uses a network.

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97. The image processing method as claimed in

claim 91, wherein said transmitting step uses a network.

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98. The image processing method as claimed in
claim 92, wherein said transmitting step uses a network.

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99. The image processing method as claimed in
claim 87, wherein said transmitting step uses a
facsimile transmission system.

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100. The image processing method as claimed
20 in claim 88, wherein said transmitting step uses a
facsimile transmission system.

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101. The image processing method as claimed in claim 89, wherein said transmitting step uses a facsimile transmission system.

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102. The image processing method as claimed in claim 90, wherein said transmitting step uses a facsimile transmission system.

15 103. The image processing method as claimed in claim 91, wherein said transmitting step uses a facsimile transmission system.

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104. The image processing method as claimed in claim 92, wherein said transmitting step uses a facsimile transmission system.

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